

## Claims:

- 1 1. At least one integrated circuit comprising:
  - 2 image processing circuitry;
  - 3 said image processing circuitry being adapted to process digital pixel output signals
  - 4 produced by a digital imaging array;
  - 5 said image processing circuitry being adapted to process saturated digital pixel output
  - 6 signals differently from non-saturated digital pixel output signals.
- 1 2. The at least one integrated circuit of claim 1, wherein said imaging array includes imaging
  - 2 array sensors:
    - 3 said image processing circuitry being adapted to process saturated digital pixel output
    - 4 signals by subtracting an estimate of the dark image fixed pattern noise for said imaging array
    - 5 sensors.
- 1 3. The at least one integrated circuit of claim 2, wherein said image processing circuitry is
  - 2 adapted to estimate the dark fixed pattern noise by sampling from a dark image comprising stored
  - 3 digital pixel output signals.
- 4 4. The at least one integrated circuit of claim 3, wherein said image processing circuitry is
  - 5 adapted to sample the dark image in regions corresponding to the regions of saturated digital pixel
  - 6 output signals in an image of interest.
- 1 5. The at least one integrated circuit of claim 2, wherein said image processing circuitry is
  - 2 adapted for use with imaging array sensors comprising at least one of a CCD sensor and a CMOS
  - 3 sensor.
- 4 6. The at least one integrated circuit of claim 1, wherein the image processing circuitry
  - 5 comprises fixed pattern noise reduction circuitry.
- 1 7. The at least one integrated circuit of claim 6, wherein the fixed pattern noise reduction
  - 2 circuitry comprises dark fixed pattern noise reduction circuitry.
- 1 8. The at least one integrated circuit of claim 1, wherein said image processing circuitry is
  - 2 adapted to detect regions of saturated digital pixel output signals in an image of interest.
- 1 9. A digital camera comprising:
  - 2 a digital imaging array comprising a plurality of pixels, and imaging processing
  - 3 circuitry to process the digital pixel output signals produced by said imaging array;
  - 4 said imaging processing circuitry being adapted to process saturated digital pixel
  - 5 output signals differently from non-saturated digital pixel output signals.
- 1 10. The digital camera of claim 9, wherein said imaging array includes imaging array sensors;

2 said image processing circuitry being adapted to process saturated digital pixel  
3 output signals by subtracting an estimate of the dark image fixed pattern noise for said  
4 imaging array sensors.

1 11. The digital camera of claim 10, wherein said image processing circuitry is adapted to  
2 estimate the dark fixed pattern noise by sampling from a dark image comprising stored digital pixel  
3 output signals.

1 12. The digital camera of claim 11, wherein said image processing circuitry is adapted to  
2 sample the dark image in regions corresponding to the regions of saturated digital pixel output  
3 signals in an image of interest.

1 13. The digital camera of claim 10, wherein said image processing circuitry is adapted for use  
2 with imaging array sensors comprising at least one of a CCD sensor and a CMOS sensor.

1 14. The digital camera of claim 9, wherein the image processing circuitry comprises fixed  
2 pattern noise reduction circuitry.

1 15. The digital camera of claim 14, wherein the fixed pattern noise reduction circuitry  
2 comprises dark fixed pattern noise reduction circuitry.

1 16. The digital camera of claim 9, wherein said image processing circuitry is adapted to detect  
2 regions of saturated digital pixel output signals in an image of interest.

1 17 A method of processing digital pixel output signals produced by a digital imaging array  
2 comprising:

3 processing saturated digital pixel output signals differently from non-saturated digital pixel  
4 output signals.

1 18. The method of claim 17, wherein said imaging array includes imaging array sensors;  
2 and further comprising estimating the dark image fixed pattern noise for said imaging array  
3 sensors;

4 wherein processing saturated digital pixel output signals differently includes subtracting an  
5 estimate of the dark image fixed pattern noise for said imaging array sensors.

1 19. The method of claim 18, wherein estimating the dark fixed pattern noise comprises  
2 sampling from a dark image comprising stored digital pixel output signals.

1 20. The method of claim 19, wherein sampling from a dark image comprises sampling the dark  
2 image in regions corresponding to the regions of saturated digital pixel output signals in an image  
3 of interest.

1 21. The method of claim 18, wherein said imaging array sensors comprise at least one of a  
2 CCD sensor and a CMOS sensor.

- 1 22. The method of claim 17, wherein processing saturated digital pixel output signals  
2 comprises fixed pattern noise reduction processing.
- 1 23. The method of claim 22, wherein fixed pattern noise reduction processing comprises dark  
2 fixed pattern noise reduction processing.
- 1 24. The method of claim 17, wherein processing saturated digital pixel output signals includes  
2 detecting regions of saturated digital pixel output signals in an image of interest.

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